



## State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

## Department of Environmental Quality

William J. Sinclair  
*Acting Executive Director*

DIVISION OF AIR QUALITY  
Cheryl Heying  
Director

DAQE-IN0122460002-09

January 21, 2009

Mike Edwards  
Geneva Rock Products  
1565 West 400 North  
P.O. Box 538  
Orem, UT 84057

Dear Mr. Edwards:

Re: Intent to Approve: Aggregate Washing and Screening Plant and a Central Mix Concrete Batch Plant; Cache County; CDS B; Attainment Area, MACT (Part 63)  
Project Number: N012246-0002

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Mr. Alan Humpherys, who may be reached at (801) 536-4142.

Sincerely,

John T. Blanchard, Manager  
Minor New Source Review Section

JTB:AH:sa

cc: Bear River Health Department

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**INTENT TO APPROVE: Aggregate Washing and Screening Plant  
and a Central Mix Concrete Batch Plant**

**Prepared By: Mr. Alan Humpherys, Engineer**

**Phone: (801) 536-4142**

**Email: [ahumpherys@utah.gov](mailto:ahumpherys@utah.gov)**

**INTENT TO APPROVE NUMBER**

**DAQE-IN0122460002-09**

**Date: January 21, 2009**

**Logan Wash Plant & Concrete Batch Plant**

**Source Contact:**

**Mr. Mike Edwards**

**Phone: (801) 281-7890**

**John T. Blanchard, Manager  
Minor New Source Review Section  
Utah Division of Air Quality**

## **ABSTRACT**

Geneva Rock Products has been operating a concrete batch plant under Small Source Exemption DAQE-013-04. Geneva Rock Products has requested to construct an aggregate washing and screening plant on this site in addition to the central mix concrete batch plant. The wash plant will process up to 400,000 tons of washed aggregate per year. A diesel generator will supply power for the wash plant. The concrete batch plant will produce up to 150,000 cubic yards of concrete per year. Power to the concrete batch plant will be supplied by local utility power. Two natural gas hot water heaters will supply hot water to the concrete batch plant.

The potential to emit totals for the facility, in tons per year, will be as follows:  $PM_{10} = 5.91$ ,  $NO_x = 16.34$ ,  $SO_2 = 1.02$ ,  $CO = 4.15$ ,  $VOC = 1.55$ ,  $HAPs = 0.03$

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the The Herald Journal on January 24, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

### **Name of Permittee:**

Geneva Rock Products  
1565 West 400 North  
P.O. Box 538  
Orem, UT 84057

### **Permitted Location:**

Geneva Rock Products: Logan Wash Plant &  
Concrete Batch Plant  
2151 N 600 W  
Logan, UT 84321

**UTM coordinates:** 429,420 m Easting, 4,624,570 m Northing

**SIC code:** 3273 (Ready-Mixed Concrete)

## **Section I: GENERAL PROVISIONS**

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

## **Section II: SPECIAL PROVISIONS**

### **II.A The approved installations shall consist of the following equipment:**

- II.A.1 **Concrete Batch Plant & Aggregate Wash Plant**
- II.A.2 **One (1) Wet Screen**  
Rated Capacity: 300 tons per hour  
Associated with the Aggregate Wash Plant
- II.A.3 **One (1) Central Mix Concrete Batch Plant**  
Rated Capacity: 120 cubic yards per hour
- II.A.4 **One (1) Wash Plant Generator**  
Power: 430 hp  
Fuel: Diesel Fuel
- II.A.5 **One (1) Small Hot Water Heater/Boiler**  
Burner Rating: 2.0 MMBTU per hour  
Fuel: Natural Gas
- II.A.6 **One (1) Large Hot Water Heater/Boiler**  
Burner Rating: 4.0 MMBTU per hour  
Fuel: Natural Gas

- II.A.7        **One (1) Gasoline Storage Tank**  
Capacity: 1,000 gallons
- II.A.8        **Two (2) Diesel Storage Tanks**  
Capacity: 12,000 gallons each
- II.A.9        **One (1) Screw Washer**  
Rated Capacity: 117 tons per hour  
Associated with the Aggregate Wash Plant
- II.A.10       **Various Conveyors and Feeders**  
Associated with the Concrete Batch Plant and Aggregate Wash Plant
- II.A.11       **Various Fly Ash and Cement Silos**  
Control Device: Bin Vents  
Associated with the Concrete Batch Plant

**II.B        Requirements and Limitations**

II.B.1        **The Concrete and Wash Plant shall be subject to the following**

- II.B.1.a       Geneva Rock Products shall notify the Executive Secretary in writing when the installation of the equipment listed in this AO has been completed and is operational. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within 18 months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO.  
[R307-401-18]

- II.B.1.b       Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any source on site to exceed 20 percent opacity. [R307-201]

- II.B.1.b.1     Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201]

II.B.2        **The Paved Haul Roads on site shall be subject to the following**

- II.B.2.a       The owner/operator shall vacuum sweep and flush with water all the paved haul roads on site to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator shall continue to vacuum sweep the road but may stop flushing the paved haul roads with water. If the haul roads are covered with snow or ice, the owner/operator may stop vacuum sweeping the paved haul roads and flushing the paved haul roads with water.  
[R307-401]

- II.B.2.a.1 Records of vacuum sweeping and water application shall be kept for all periods when the plant is in operation. The records shall include the following items:
- A. Date and time treatments were made
  - B. Number of treatments made and quantity of water applied
  - C. Rainfall amount received, if any
  - D. Records of temperature, if the temperature is below freezing
  - E. Records shall note if the paved haul roads are covered with snow or ice. [R307-401]

II.B.3 **The Unpaved Haul Roads on site shall be subject to the following**

- II.B.3.a The owner/operator shall cover all unpaved haul roads and wheeled-vehicle operational areas around the aggregate wash plant with road base material, and shall use chemical stabilization on all other unpaved haul roads and other wheeled-vehicle operational areas on a regular basis. The owner/operator shall use water application on these areas to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator may stop applying water and chemical stabilization to the unpaved haul roads and wheeled-vehicle operational areas. [R307-401]

- II.B.3.a.1 Records of water application and chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:
- A. Date and time treatments were made
  - B. Number of treatments made, dilution ratio (for chemical treatment), and quantity of water or chemical treatment applied
  - C. Rainfall amount received, if any
  - D. Records of temperature, if the temperature is below freezing. [R307-401]

II.B.4 **All Haul Roads and Fugitive Dust Sources on site shall be subject to the following**

- II.B.4.a The owner/operator shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the Logan Wash Plant and Concrete Batch Plant. The owner/operator shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO. [R307-401]

II.B.4.a.1 The fugitive dust control plan shall address the following specific control strategies:

Exposed Areas

1. Maintaining moisture in exposed areas
2. Other stabilization methods in exposed areas
3. Methods to ensure exposed areas are not re-disturbed by on-site equipment or haul traffic

Storage Piles

1. Maintaining moisture in storage piles
2. Minimizing drop distance from conveyors to storage piles
3. Minimizing activities during adverse meteorological conditions (i.e. high wind events). [R307-401]

II.B.4.b The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site. [R307-205]

II.B.4.b.1 Visible emission determinations for fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-201]

II.B.4.c The owner/operator shall install water sprays on all storage piles on site to control fugitive emissions. Sprays shall operate as needed to ensure the opacity limits listed in this AO are not exceeded. [R307-401]

II.B.4.d The owner/operator shall conduct its operations in such a way to minimize fugitive dust and fugitive emissions and shall abide by all applicable requirements of R307-205. [R307-205]

II.B.5 **The Central Mix Concrete Batch Plant shall be subject to the following**

II.B.5.a The central mix concrete batch plant shall not produce more than 150,000 cubic yards of Concrete per rolling 12-month period. [R307-401]

II.B.5.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by scale records or sales records. The records of production shall be kept on a daily basis. [R307-401]

II.B.5.b The owner/operator shall install bin vents on all material storage silos associated with the concrete batch plant. Displaced air from the silos shall pass through the bin vents before being vented to the atmosphere. [R307-401]

II.B.6 **The Generator for the Wash Plant shall be subject to the following**

II.B.6.a The engine/generator for the aggregate wash plant shall not exceed more than 2,300 hours of operation per rolling 12-month period. [R307-401]

II.B.6.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

II.B.6.b The owner/operator shall not allow visible emissions from the diesel engine/generator to exceed 20% opacity. [R307-201]

II.B.6.c The owner/operator shall use #1, #2 or a combination of #1 and #2 diesel fuel in the diesel engine/generator. [R307-401]

II.B.6.d The sulfur content of any fuel oil or diesel burned by the owner/operator in the diesel engine/generator shall not exceed 0.50 percent by weight. [R307-203]

II.B.6.d.1 The owner/operator shall determine sulfur content of fuel oil by ASTM Methods D4294-89 or approved equivalent. Certification shall be either by the owner/operator's own testing or test reports from the fuel oil or diesel fuel marketer. [R307-203]

II.B.6.e The owner/operator shall abide by all applicable provisions of 40 CFR 63, MACT Standards Subpart A (General Provisions), 63.1 to 63.16 and Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), 40 CFR 63.6580 to 63.6675 for the stationary diesel engine/generator on site. [40 CFR 63 Subpart ZZZZ]

II.B.7 **The Aggregate Washing and Screening Plant shall be subject to the following**

II.B.7.a The aggregate washing and screening plant shall not process more than 400,000 tons of aggregate material per rolling 12-month period. [R307-401]

II.B.7.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of processing shall be kept for all periods when the plant is in operation. Amount of material processed shall be determined by belt scale and/or truck scale records of pre-washed material and/or purchase records of pre-washed material. The records of processing shall be kept on a daily basis. [R307-401]

II.B.7.b The owner/operator shall not allow any visible emissions from the wet screening operation or any conveyor on site that processes saturated material. [R307-401]



### **Section III: APPLICABLE FEDERAL REQUIREMENTS**

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

MACT (Part 63), ZZZZ: Recipro. Int. Comb Engine (RICE)

### **PERMIT HISTORY**

The final AO will be based on the following documents:

Is Derived From	Additional Information dated November 20, 2008
Is Derived From	Additional Information dated September 26, 2008
Is Derived From	Additional NOI Information dated September 17, 2008
Is Derived From	Initial NOI dated July 11, 2008
Supersedes	Small Source Exemption DAQE-EN2246002-04 dated March 17,
2004	

## ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO <sub>x</sub>	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM <sub>10</sub>	Particulate matter less than 10 microns in size
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO <sub>2</sub>	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds